Draft

PRELINMINARY REMOVAL ASSESSMENT
NOVEMBER 10, 1992

I. SITE: Certainteed, Maline Creek Asbestos Site

LOCATION: St. Louis Missouri

II. EP&R CONTACT: Don Hamera

SPFD CONTACT: Greg Reesor

III. BACKGROUND

w/hold as pre-dec withheld as predecisional (Hemera #3)

A. Site Description

The Certainteed/GAF, Maline Creek Asbestos site is located just off 600 St. Cyr Road in the corporate limits of Riverview and Bellfontaine Neighbors in Metropolitan St. Louis, Missouri. The Former Certainteed property is now owned by P.G. Investments. Branch Metal Processing, owned by P.G. Investments and Gateway Container Port, Inc. presently occupy the site. Clark properties of Hazelwood, Missouri now owns the former GAF site. This property is now occupied by the new Era Group, Riverview Industrial Services, and MacMillan - Blodell Building Materials. The Certainteed and GAF Corporations use to manufacture asbestos containing materials (ACM) at this site. The common area between the two facilities was used for many years as a landfill by these two companies. Maline Creek runs adjacent to these two properties and the landfill itself. Approximately 150-200 people live in a residential area west, just across Maline Creek. Also a nursing home is located approximatly 350 feet northwest of the site.

The landfill itself lays between the former Certainteed and GAF manufacturing plants. The landfill is approximately seven acres in size and contains several different types of ACM including transite pipe, sheeting material, and settled solids from process wastewater solids. The Environmental Protection Agency issued an Administrative Order to the GAF corporation on 2/26/79 to cover the landfill. Pursuant to this order both companies hired a consulting firm to draw up closure plans to comply with the Missouri Solid Waste Management Law. Even Though the Order was issued to the GAF Corporation, Certainteed shared the expense for covering the waste piles and for stabilizing the Maline Creek bank. Letters from the EPA (4/28/80) and the Missouri Department of Conservation (MDNR) (6/2/80) to the GAF Corporation verified approval of the closure actions taken at that time. A site inspection performed by MDNR (St. Louis Office) confirmed that the project had been completed in basic conformance with the plans prepared by consultants, Reitz & Jens, Inc.

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In January 1982 the Metropolitan Sewer District (MSD) conducted a cleanup in liew of future stream channelization improvements along a 2.5 mile stretch of Maline Creek, a portion of which passed through the Certainteed and GAF Properties. MSD awarded the project to the Bennish & Bommarito Construction Company. Information gleaned from the file indicates that the aforementioned construction company spent 2 weeks hauling away transite pipe and other materials from the northwest corner of the Certainteed site, just off St. Cyr Road. Because of the large amount of transite pipe involved, it was then decided to use a crane and a wrecking ball to crush the remaining pipe into the creek bank to smooth out the channel. This area was allowed to remain undisturbed in the original closure action (1980) taken by Certainteed and GAF. At that time, since this material was interspearsed among trees and heavy brush, it was decided to let this portion of the creek bank remain undisturbed, the reason being that the trees and brush would keep the ACM from migrating. The channel flucuations from Maline Creek and the removal of the dense vegetation from the creek bank has caused the creek bank to erode, thus exposing this landfilled material.

B. Waste Management

There is an estimated 1000 square feet of exposed asbestos scrap pipe, sheeting material, and to a lessor extent insulation materials located along the upper portion of Maline Creek (northwest corner of former Certainteed property). Also this material is strewn all about the creek (a large portion of the entire creek adjacent to the Certainteed and GAF properties). Also further downstream near the actual landfill itself (approximately seven acres) the Bank of Maline Creek is eroding away which could potentially cause more asbestos material to become exposed.

For many years both Certainteed and GAF landfilled ACM in the common area behind the two plants. This area remained an open, uncovered area until 1979 when the EPA issued an administrative order to the GAF corporation to cover this landfill. Both Certainteed and GAF ceased manufacturing operations in 1979.

Several previous investigations have taken place at this site. In 1988 at the request of the Air and Toxics Division, the Air Monitoring Section of the Air Monitoring and Compliance Branch inspected the area in question. This inspection revealed that asbestos containing wastes (transite pipe and siding) were observed in and around the creek. The inspector notes that while no visible emissons were observed, the potential for abestos fiber release will increase as the transite pipe and other asbestos containing materials deteriorate. Samples were also taken at this time which confirmed the presence of asbestos. The EPA tasked the Technical Assistance Team (TAT) to perform a site assessment of the Certainteed - GAF site. On March 17, 1992 TAT members documented site conditions, collected samples and videotaped the area in and around the creek. The conclusion from this visit (see TAT report dated May 8, 1992) indicate that ACM are exposed which could

potentially lead to a release, especially with the quantity of material present. This report also indicates that some of the scrap materials are in a friable state, while others may become frible as weathering and erosional process take their toll. These particles may become airborne and present a hazard to nearby populations. The samples taken by the TAT also confirm the presence of asbestos laden material. The investigator noted that the problem has intensified since the 1988 investigation. Another investigation by TAT completed in September, 1992, showed large amounts of transite pipe located in the northwest corner of the Certainteed property (as stated earlier, this area was allowed to remain undisturbed in the original closure action) Also, investigations by the EPA in July, 1992 have documented large amounts of ACM which could potentially lead to a release are present on site. This area was also the subject of a recent citizen complaint which was refered to EPA through an inquiry from U.S. Repesentative William Clay's office.

IV. Threat

A. Evidence of Release

As stated earlier several forms of ACM are present in and around the Maline Creek adjacent to the Certainteed and GAF properties. The types of materials present include transite pipe (some of it is in a weathered crumbling condition), sheeting material, insulation, and a slag/slurry type substance which also readily crumbles releasing asbestos fibers. Much of the exposed material lies in a 4 to 6 foot layer next to the creek in the extreme northwest corner of the Certainteed property. Tests results confirm Chrysotile and Crocidolite types of asbestos present in concentrations ranging from 15%, up to 85%. Some of the material has and will continue to cave off into Maline Creek and will be carried off into the Mississippi River. Numerous piles of friable asbestos material are located on the former Certainteed property. These piles are lying out in the open where friable materials could easily migrate. There are also abandoned manufacturing buildings located on site which contain friable asbestos material. Some of these buildings have broken windows. This friable insulation could migrate and potentially affect nearby populations.

Directly to the west(120 to 150ft) of the Certainteed/GAF site is a residential subdivision where approximately 150 - 200 people reside. Also a nursing home lies 350 ft northwest of the site. Particles from the more frible material may become airborne and present a potential inhalation hazard to humans which live near this site. Also this ACM is caving off and falling into Maline Creek, thus releasing fibers into the water.

B. Threats to public health or welfare

The potential release of airborne, friable asbestos threatens the nearby residents and industrial employees. As the ACM continues to weather and break down, asbestos fibers may become

airborne and pose an inhalation threat to nearby populations. The ACM are located just 120 - 150 ft. from nearby subdivision residents. From the Oil and Hazardous Material/Technical Assistance Data System (OHM/TADS), the chronic health risk from long term continued inhalation of asbestos dust results in asbestosis. a form of pneumocoiosis. The primary effect of inhalation is an interstitial pulmonary fibrosis. Asbestosis can increase the risk of lung cancer.

C. Threats to the Environment

The creek area is not secured and animals from the nearby residential subdivision are able to access the area. Also large amounts of ACM are now located in the Maline Creek and the potential for much more material to cave off into the creek is present. The Maline Creek joins the Mississippi River approximately 1/2 mile downstream.

V. Evaluation of the Potential for a Removal Action

This site presents a potential inhalation hazard to humans living in the residential area near the site, especially with the large amount of material present. Also if no action is taken large amounts of ACM will continue to slough off into the Maline Creek. The close proximity of the residential area in relationship to the creek is also very important. Maline Creek runs directly adjacent to the housing subdivision and in some cases is located only 120 ft from the backyards of houses in the subdivision.

VI. Recommendation

A removal action is warrented in this particular case, especially with the quantity of ACM present (friable material) and the proximity of humans inhabiting the area around the Certainteed and GAF facilities. The ACM will continue to weather and friable asbestos may become airborne posing an inhalation risk to nearby inhabitants. Also the material is caving off into Maline Creek, thus contaminating the creek which eventually flows into the Mississippi River. More information will have to be obtained through engineering studies and further assessment to properly calculate cost data and removal strategies.

cc Greg Reesor